

Telecommunications 'heart' opens in Perth

"Perth was the first capital city to have an automatic telephone exchange. It was the central exchange in Murray Street, installed in 1914. Today, the Perth telephone network has a higher proportion of modern equipment than any other capital city."

WA STAFF PRAISED

So said Telecom Australia Chairman Bob Somerville at the opening late last month of the new \$21.5 million Wellington Telecommunications Building in Perth by the Minister for Post and Telecommunications, Hon. A. A. Staley.

The Chairman expressed his pleasure with the Commission's first meeting in Perth — one of a planned series of interstate visits and meetings of the Commission.

"We are well satisfied with the performance of our staff throughout Western Australia," he said, "and have no doubt about their keenness and enthusiasm in contributing to the growth of the State."

"Telecommunications facilities in W.A. have expanded rapidly over the past 15 years. Open wire trunk routes have given way to cable networks.

Broadband radio and coaxial cable links have been established throughout W.A. and to the Eastern States.

"Our Engineering staff worked in close co-operation with the mining companies in the development of the Pilbara. There is no doubt they will continue to do so with other companies.

MODERN INTEGRATED

"At Federation, there were 2445 telephone services connected to 11 manual exchanges in the State. Today there are 324,000 services and only about 1% of these rely on manual operation. We have, in fact, a modern integrated telecommunications network designed to meet the growing needs of the State.

"By improved productivity and use of new technology we have been able to hold our basic charges for telephone and telex at 1975 prices and

have made some reductions. This has brought a good response from our customers.

"Demand for Telecommunications facilities continues to be strong. Our earnings are high and as we plough them straight back into the business we are able to maintain a high level of employment and constantly improve our services.

"I should like to extend my appreciation to the people who have been involved in the construction of this building. Our

thanks go to the Director of the Commonwealth Department of Construction and all his architects, engineers and supervisors who designed its many complex features and supervised its erection.

"We thank also the management and staff of H. A. Doust Pty. Ltd., the main contractor, and all the sub-contractors, together with the predecessor of the Department of Administrative Services, who negotiated the purchase of the site.

"Last, but by no means

least, our thanks to the Telecom staff both in W.A. and in headquarters who have been closely involved in this project since its inception."

Building details — more pix — page 5.

**PERMANENCY
OFFER TO
TEMPORARIES
— PAGE 3**



The impressive Aztecian frontage of the new Wellington Telecommunications Building. When fully equipped in 1980, it will be the hub of WA communications.



Telecom

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Correspondence to the Editor "Telecom"
Telecom Australia 199 William St Melbourne
Vic 3000 Telephone 630 6505

Annual Report Summary

CHAIRMAN: TELECOM EMPLOYMENT LEVELS MAINTAINED

Commenting on Telecom Australia's 1977-78 Annual Report the Chairman Mr R. D. Somervaille, said that Telecom's third year had been marked by a record demand for new services, record traffic levels and record connections of new services.

The year had seen basic telephone and telex charges remaining unchanged at 1975 prices. 'The continuing freeze on basic charges was Commission policy' Mr Somervaille said, 'and has been a major factor in demand continuing to grow.'

'We have maintained a high employment level in Telecom itself and significantly increased our productivity'.

Productivity in Telecom had risen by 5% during the year, a high standard of service had been given and the average capital investment per net new telephone service had been reduced \$3,600, a



MR SOMERVAILLE

reduction of 30% over the last three years when measured at constant prices.

Earnings had risen by nearly 11% and the combination of high demand, productivity and Telecom's cost cutting

programme had returned a profit for the year of \$184.9 m. This represented a net return of 2.7; (7.5% before interest) on Telecom's assets which now exceed \$6,600 m. All of the profit had been ploughed back into the business.

Telecom successfully raised \$210 m. on the public loan market during the year. A feature of Telecom loans — marketability — was emphasised by the trading in securities on Australian stock exchanges. Turnover for the year was \$55 m.

MAJOR PROJECTS

Public loan money and profit represented 42% of Telecom's investment for the year of \$937 m. on new works and services. This investment covered 110 major projects — trunk

Support for Telecom's business operations came recently from opposite ends of the political spectrum. PRIME MINISTER FRASER

Replying to criticism of Telecom's \$185 m. profit by Victorian Premier Hamer, Mr Fraser said:

'The profit represented a return of only 2.7 per cent on its net assets and this was a very modest return by the standard of most business enterprises.'

'We should welcome the efficiency of this enterprise and the fact that it is able to generate capital from internal sources while providing an important community service.'

OPPOSITION SPOKESMAN ON, POST AND TELECOMMUNICATIONS

Labor front-bencher Mr Ted Innes, said Telecom had a mandate to operate as a profit-making company. 'Those people who cry out for reductions in Telecom rates never cry out for reductions in prices when private corporations announce massive profits,' he said.

Mr Innes accused critics of the profit of being hypocritical.

systems, exchange installations etc ranging from \$500,000 to \$20 m. and work on over 200 building projects each costing over \$250,000.

During the year Telecom's total expenditure on operations and new works was \$2,238 m. This included \$379 m. for materials, over 90% of which came from Australian industries, an investment of \$65 m. on buildings and properties, \$57 m. for lighting, power, water and leasing and \$232 m. for payment for services rendered to Telecom. The salaries and wages bill for 1977/78 was \$975 m.

During the year Telecom reduced the

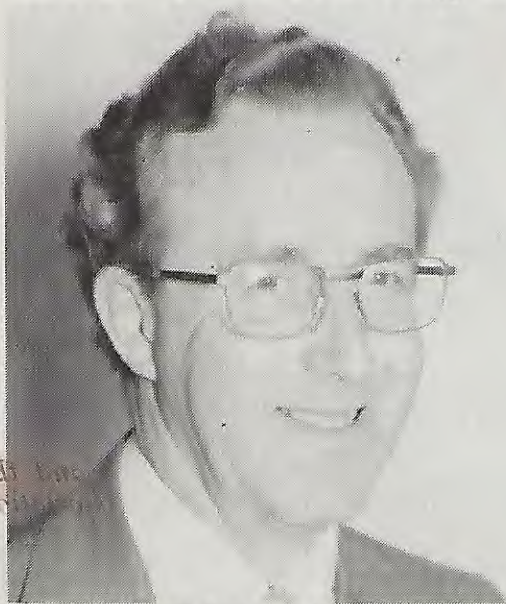
Sunday day rate for STD calls, announced a reduction for many telex charges as from 1 July 1978 and foreshadowed the lower STD charges, including a new economy rate, to be introduced later this year.

Mr Somervaille said that the outlook for the Commission was bright. Telecom expected to hold its basic charges for at least another year and foresaw an overall growth in business of about 8%.

The year ahead would see the need for further large capital investment and the maintenance of the present employment levels within Telecom.

Staff will have already received their Telecom factsheet and special Mini Annual Report. Further interesting extracts from the 1977-78 Annual Report will appear in our December issue.

Customer services new WA manager



Mr. George Sayer who has been appointed Chief Manager, Customer Services Department, Telecom West Australia. Mr. Sayer was previously Co-ordinator Progress Reporting for Telecom in W.A. His appointment follows the sudden death last July of former Chief Manager Ralph Sanderson.

254 GAVE THEIR BLOOD



A total of 277 Headquarters staff volunteered to give blood and 254 donations were collected in a campaign jointly sponsored by Hq Accident Prevention Section and API Central Office Branch to replace Red Cross blood plasma lost in a recent fire. 208 were new donors and it is hoped they will continue to donate regularly in future. Special thanks to Communications House Sister Judy Ferrigno and all who helped to make the appeal a great success. Our photo shows Chief Accident Prevention Officer Neville Betts' blood being tested for octane rating.

Permanent offer to 23,000 temps.

Telecom Australia has recently concluded making special offers of appointment to almost all of its temporary staff. These offers arose out of discussions at Telecom Consultative Council meetings held since September, 1976 and, more recently, with the staff associations having coverage of

large numbers of temporary staff.

The numbers of staff involved include:

- about 4,000 temporary Telephonists and Phonogram Operators;
- about 11,000 temporary Lines staff; and
- about 8,000 temporary staff working in a wide range of

designations, but mostly as clerical assistants, artisans, food service staff, storemen, assistants in various technical areas, typists and transport staff.

The offers were made to almost all temporary staff by means of Staff Information bulletins issued in April and September, 1978. The

main conditions of the offers were that:-

- six months continuous full time service was required,
- this service must have been satisfactory, and
- the service must have been in the field in which appointment was sought.

Appointments in all cases will be made to base grade positions

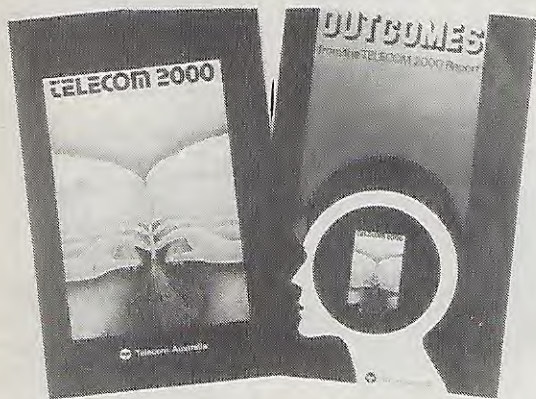
and will be subject to normal probationary and confirmation conditions.

At this stage, it appears that roughly 80% of temporary staff have accepted the offer. The cost to Telecom, in additional superannuation employer contributions will be in the vicinity of \$30 million.

Telefinder regions—Gold Coast first

On November 1, Telecom Australia extended its Telefinder Radio Paging Service with the introduction of a new 'regional' service to Brisbane and the Gold Coast.

T2000 Follow-up



Telecom Australia Chairman, Mr R. D. Somervaille, has welcomed the publication of Outcomes from the Telecom 2000 Report.

He said the responses it contained have helped in formulating Telecom policy and in identifying areas for further study. They had been particularly useful in designing Telecom's Corporate Plan for the next decade.

Overall there has been a valuable input to Telecom's consideration of many important issues as a result of the public response, through discussions and seminars and particularly through more than 200 detailed written responses received.

The latter could generally be identified with tertiary institutions, major business sources and government bodies.

Outcomes details these responses — the critical, the laudatory and the sceptical.

Telecom 2000 — Telecom's first major exercise in open planning was published in 1976 and reprinted late in 1977.

It represented two years work by a multi-disciplinary group within Telecom, and discussed a range of possible telecommunication futures for Australia up to the year 2000 AD.

The recommendations in Telecom 2000 were based on:

- Research within Telecom
- Studies of likely trends in Australia and overseas
- Commissioned research — in marketing and social fields
- Discussions with user groups, manufacturers, educationalists, etc.

Following the distribution of 25,000 copies (here and overseas) further discussions and seminars were held to discuss the report and public comment was invited.

Until now the service has only been available to customers in capital cities. This 'home' service covers an area of up to 40 km radially from the centre concerned.

[Telefinder provides a point to point radio link whereby a user carries a lightweight pocket receiver (pager) which emits an audible 'beep' (or vibrates) when it receives a uniquely coded signal broadcast from a Telecom radio transmitter].

The main difference between the two types of Telefinder service is that in a Home service the pager only operates within a defined area. In the Regional service a pager will operate in all the Home service areas comprising that region.

So now, if a Queensland customer has regional Telefinder coverage he can be contacted either in Brisbane or in the Gold Coast area, which roughly covers 80 km along the coastal strip and westward about 20 km to the Hinterland ranges.

As with the present home service the regional Telefinder Service is extremely reliable in operation. However there are



Gold Coast District Telecom Manager Stan Hilton. Gold Coast had the honor of being the first provincial centre in Australia where Telefinder Paging was provided. "More than 2000 customers subscribe to the system in Brisbane and the service was extended to the Gold Coast following public demand," Stan said.

small pockets in each home service area where the radio signals will not be received by a pager because of terrain obstructions.

If a customer wishes to widen the use of his Telefinder Service by becoming a regional customer he must contact his pager supplier to arrange to have the code

plug changed. (The approved companies are as for the Home service — Motorola, Philips and Telmar). It will also be necessary to change the telephone number of the existing pager.

The annual Telecom charges for the two types of Telefinder Service are:

Home Service single address \$45, dual address \$90.

Regional Service single address \$90, dual address \$180.

A newspaper and radio advertising campaign has been scheduled for Brisbane and Gold Coast media for three weeks from the launch. In addition, two new Telefinder brochures are being produced as sales support — a general brochure for national application and a special leaflet explaining the various aspects of the regional service.

Regional services will be progressively introduced until eventually State and then National services become available. The next regional service will be introduced to Tasmania, in December, to incorporate the Hobart and Launceston home service areas.

TELEPHONISTS — SHORTER HOURS

Following discussions between Telecom Australia and the Australian Telephone and Phonogram Officers' Association (ATPOA) an agreement, ratified by the Conciliation and Arbitration Commission, has enabled the introduction of a shorter working week for telephonists. Telephonists formerly working 39 or 40 hours per week will be rostered for shifts aggregating 36 3/4 hours per week. The changed shifts were introduced on November 5, 1978 and in all about 1500 telephonists are affected by the new provisions.

HEADQUARTERS

NAME	COMPLETED YEARS OF SERVICE
G. F. Addison	34
D. McApsey	34
H. McBean	39
K. T. Boyle	39
H. F. Carr	39
S. F. Casey	43
L. F. Cooper	27
A. G. Corker	29
W. B. Davidson	28
E. M. Dawson	35
E. R. Dennis	30
J. Dickson	29
R. H. Fisher	34
H. M. Fitzpatrick	39
A. L. Fry	29
R. E. Hartkopf	27
J. G. Haw	33
L. G. Heritage	30
L. E. Jones	29
E. F. Lane	48
M. F. Lane	27
L. K. Manderson	49
M. McLachlan	40
V. G. Norden	42
C. W. Pink	25
A. W. B. Quinn	31
W. P. Quinn	38
J. R. Ramsay	40
J. Roberts	41
B. E. Robinson	39
B. F. Ryan	26
J. Sheppard	35
K. Talbot	26
F. K. Temby	36
R. W. Turnbull	45

ADDITIONS, AMENDMENTS TO TELECOM'S FIRST SERVICE AWARDS

Printed here are lists containing additions and amendments to the inaugural Telecom Service Award nominees as published in TELECOM, issue No. 32 of July 1978.

The lists contain also some corrected spellings and alterations which were picked up during acceptance checks of the awards.

Individual treatment of each award is delaying the inaugural issue. No two awards are identical in appearance, ranging from a matt or pewter type tablet to a more pronounced silvery appearance. In addition, each award will be seated on a woven material insert produced in Telecom colours complete with the Telecom logo.

It is expected that the first batch of more than 1200 awards will have been forwarded to the States by late-November and each State will receive a number of awards for the initial distribution.

Provision of the initial and future awards are the responsibility of Headquarters Personnel Dept. who are currently formulating in-

structions to States in respect of future awards. It is estimated that about 300 eligible officers have retired since June 1978 to October 1978 and the associated awards will be dealt with early in 1979.

For further information, Mr R. Cadman, National Operations Section, Personnel Department (Tel. (03) 67 7658).

J. W. Neville	29
W. B. V. Nicholls	33
A. W. Norgate	37
J. E. Nuzum	39
F. G. O'Donnell	40
D. L. C. Owens	31
T. C. L. B. Patterson	28
D. L. Pearce	31
G. R. J. Pearsell	26
R. Peel	25
G. Philip	29
J. H. F. Pope	30
J. L. Provan	29
J. J. Quirk	33
J. R. Reece	29
E. A. O. Revell	42
E. F. R. Russell	31
R. A. Sandman	33
G. A. Schwerdfeger	30
B. A. Skingle	30
C. A. Smith	29
A. E. Stamper	29
L. C. Sweet	30
W. H. Stephens	29
H. H. Stone	34
R. A. Stringer	37
D. McThompson	28
R. Tulloch	38
T. J. Van Staveren	31
T. L. Wallace	27
J. R. Watt	27
C. W. C. White	25
C. J. C. Wilkinson	50
R. E. Wilson	27

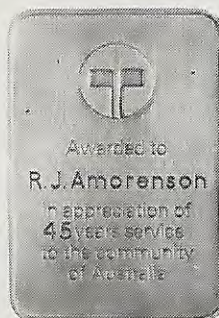
NEW SOUTH WALES

G. W. Adamson	29
J. J. Banfield	27
J. K. Bashford	25
A. Battishall	32
A. I. Beazley	32
J. F. Bulger	27
K. J. S. Burgess	29
F. T. Camarch	28
J. L. Canavan	36
J. W. Coen	26
A. A. Cope	29
K. K. Cullen	27
S. H. Dunuers	26
J. G. H. Dillon	36
P. N. S. Dunkin	30
J. C. Ellison	49
F. P. Evans	30
E. Farr-Wharton	32
R. H. Fisher	31
H. D. Fitton	30
W. L. Foley	32
C. W. Fricker	50
G. E. Gall	26
I. J. Gold	35
A. S. Griffiths	30
D. A. Grigg	27
F. H. Hailstone	25
F. P. Hansen	50
S. Hart	32
W. J. Heddle	35
J. Henderson	32
K. Henley	36
L. E. Hollins	39
P. D. Hollis-Watts	29
A. D. Howard	48
D. G. Huntley	38
N. A. Jeffree	50
R. J. Jepsen	50
F. G. Johns	25
E. E. Kelly	40
J. V. Kenny	50
C. Ladmore	29
D. L. Loes	30
W. G. Maguire	36
R. E. Male	39
A. J. Malloy	27
P. W. Mangan	31
M. T. Meadham	28
K. T. Medhurst	31
A. H. Meier	31

J. Mcloch	37
H. W. Moffit	42
W. A. Morris	32
N. S. McDonald	26
J. B. McGuigan	35
J. C. McLeod	30
J. D. Neill	31
W. C. Norris	30
J. Ocipka	27
J. O'Connell	29
S. A. Palmer	26
T. C. Pauling	27
J. A. Payne	48
R. Pearce	25
A. E. Pike	31
F. J. Powell	27
R. G. Procter	26
V. J. Quigg	41
G. R. Rattenbury	30
R. A. Ray	30
A. G. Read	31
N. A. Richardson	28
D. H. Robertson	26
L. T. Roberts	30
R. F. Ryan	27
E. N. Sattler	32
R. J. Schleicher	39
F. T. Scott	48
B. O. Sheldon	29
F. K. G. Shields	28
W. A. Simcox	32
G. E. Smith	31
L. S. V. Smith	38
W. H. Smith	30
S. F. A. Stephens	30
A. J. Stephenson	30
K. G. Taylor	41
E. T. Thirkell	25
R. H. Thurtell	27
J. M. Toohey	37
L. C. T. Turner	25
H. Wenban	28
D. M. Wilson	29
C. W. Wright	25
F. R. Yates	29
M. Young	28

VICTORIA

M. Ashby	32
W. R. B. Austin	27
R. M. Bavington	34
L. G. A. Beckingham	26



A typical Service Award tablet which sits on a woven mat in a polished wood surround.

W. J. Bell	29
N. E. Billingham	28
R. Blewett	40
W. J. F. Bourke	29
D. Boyd	33
R. C. H. Bravington	30
J. W. F. Buley	29
N. S. Candy	31
D. E. Carroll	27
J. P. Champion	27
K. W. A. Clow	36
W. J. Cockerell	50
N. T. P. Confoy	27
H. A. E. Cooke	29
O. N. S. Cooksley	28
W. H. H. Costelloe	31
C. E. N. Cowley	37
N. C. Cutter	30
J. E. S. Davey	31
N. A. H. Dean	28
E. C. De Gruchy	37
H. R. Densley	28
L. W. Dinsdale	32
R. A. F. Donnelly	27
B. J. J. Earl	30
F. P. Edbrooke	26
M. K. Edwards	27
V. J. E. Eldridge	29
W. F. Feldt	29
H. R. Fitzsimmons	37

E. H. S. Foot	30
V. H. G. Frankland	32
S. W. Fraser	31
F. W. W. Gant	30
C. L. Glover	41
E. L. P. Grayden	28
J. W. L. Grove	37
P. R. Grubb	28
B. P. Hackett	27
S. H. V. Hargreaves	27
I. R. Harvey	30
R. E. Haynes	33
B. T. Hickey	32
J. D. Hickey	41
A. J. Hildebrandt	32
L. J. H. Holmes	35
W. V. Hooker	29
F. A. J. Hutson	26
P. N. J. Iloff	40
W. B. Ingram	31
D. K. J. Joiner	37
N. R. Kaufman	37
N. F. Kennealy	27
J. S. Kilduff	37
A. S. A. Kipping	26
V. C. C. Lang	31
G. E. Lee	27
G. T. Le Masurier	38
H. D. Lever	29
A. Levey	33
T. Lightfoot	29
A. S. Long	29
M. Lovell	29
J. E. Lucas	29
J. L. Ludbrook	27
E. R. Lynch	26
J. P. Lynch	28
W. J. Madden	37
A. S. Mardon	25
R. W. Marshall	26
J. L. Marian	35
E. M. McGary	28
F. O. R. McNicoll	45
R. D. McRae	35
K. J. McShae	29
M. Micinovac	28
E. G. Mills	50
G. H. Morris	30
D. O'N. Morton	28
S. E. T. Morvell	42
F. L. Murphy	27
T. R. Murphy	36
P. L. Murray	30

QUEENSLAND

C. Mc. Adam	28
E. M. Baird	40
N. S. F. Bickerstaff	27
E. L. Branch	30
C. N. Brown	34
J. E. Cowper	29
J. J. K. Doolan	30
J. R. Duncan	40
J. T. Dunn	32
M. A. Garrahy	30
K. M. Gordon	25
B. E. Gotcher	29
D. P. Gregor	32
W. J. Hand	49
J. Harris	30
G. W. Hayward	30
C. S. Hills	30
E. G. Hoffman	32
J. S. Hopkins	27
N. G. Hughes	26
M. R. Knudsen	28
J. S. Leaver	31
M. G. Marshall	28
N. D. Merritt	32
E. E. McMugh	29
A. L. McMahon	29
A. J. McVey	50
L. H. Neumann	30
F. W. Neville	29
F. M. Nolan	39
T. G. Noyes	29
B. J. Paris	28
R. L. Petrie	30
F. W. Ravery	29
F. J. A. Riley	32
S. G. Rolph	49
J. A. Rowden	30
R. M. Sayce	31
R. B. K. Scarr	32
J. D. Smith	26
T. Stephens	26
A. G. Stevenson	29
R. W. Swenson	39
W. Vorobioff	29
J. W. Warnock	29
H. B. Wells	28
K. Williamson	30

TASMANIA

E. C. Barnes	49
E. V. Clifford	26
E. Cure	30
D. W. Dannock	30
D. B. Espie	30
D. G. E. Eyre	37
L. A. Frith	50
W. J. Goldsack	29
A. J. McKellar	35

WELLINGTON EXCHANGE

(from p.1)

Space is the operative word in the new 17-storey Wellington Telecommunications Building. It has been designed to accommodate the major part of the international, interstate and intrastate trunk and subscriber trunk dialling facilities and to allow for the expansion and modernisation of the telex networks, data transmission facilities and computer facilities for Telecom.

The computer is the heart of the exchange operation. When it is installed and programmed it will command all the switching circuits and determine in what order the operations will be carried out.

It will be required to sift, sort, select and make commands affecting hundreds of switching functions in a fraction of a second.

Some of the groundwork has already been done to prepare the way for the millions of dollars worth of modern electronic telecommunications equipment which will eventually be housed in the building.

This early work involves providing stabilised power and an emergency power generating plant on the top floor of the building. The emergency plant consists of four big V12 cylinder diesel motors which drive generators capable of supplying the total power needs of a town the size of Carnarvon, W.A.

The emergency power plant can be automatically switched on if the power fails from the mains.

The whole building has been air-conditioned to maintain a temperature of about 22C all the year round and sensors throughout the structure gauge humidity.

INJECTS VAPOR

Should the humidity fall below a pre-determined level, water vapour is automatically injected into the airconditioners.

To keep an eye on all the engineering services in the building there is an all-seeing monitor display terminal on the 15th floor.

Lifts, lights, power supply, heating, cooling, water pumps and pipes and security locks are monitored

for 24 hours each day. If anything, anywhere goes amiss it is immediately transmitted to visual display terminals, giving details of location and extent of the trouble.

To connect all the facilities into the WA and national telephone networks 288 cable ducts and 10 jointing chambers have been provided at a cost of \$1.75 million.

This is the biggest quantity of ducts radiating from any WA telephone exchange and they will provide for anticipated expansion for the next 50 years.

Seventy-five kilometres of 100-millimetre-diameter conduit was used to provide this network, 90,000 bricks, 1100 cubic metres of concrete and 50 tonnes of cement.

The largest single external plant project in the metropolitan area undertaken by the Telecom WA Engineering Construction Branch, it has taken three years to complete.

Little electronic equipment has yet been installed. The Communications Centre is not expected to begin operations until at least June 1980.

Here are some interesting excerpts from the Staff section of Telecom Australia's Annual Report.

FLEXIBLE HOURS

From 1974, flexible working hours schemes were under trial. The trial period has now been completed and from December 1977 a standard scheme has operated in all States, except Queensland and South Australia where the former schemes will continue.

The schemes now adopted include —

- an optional nine day fortnight
- flexible starting and finishing times
- flexible meal breaks
- carry over of excess hours to the next period.

About 21,000 staff will benefit from the flexible hours provisions.

The flexible working hours schemes, with mutual co-operation between staff and supervisors, can provide benefits to both Telecom and to staff. The benefits include —

- flexibility to match working hours to current work load
- improved staff morale, job satisfaction and working effectiveness
- reduced incidence of one day absences
- a better balance between private and work life
- ability to make improved travel arrangements to and from work.

The flexible working hours schemes have received the support of staff and management.

WELFARE

Facilities for staff welfare and counselling and referral services are being continually updated. The Telecom Consultative Council has given support and encouragement in developing pre-retirement activities and a significant number of 'pre-retirement' seminars were conducted with favourable reaction from staff at all levels. These seminars are being extended and a booklet covering aspects to be considered in planning for retirement is to be issued to all staff aged 54 years and over.

HEALTH, SAFETY

Telecom's objective is to reduce the number of 'Lost Time Accidents on Duty' by 50% in five years. Progress is encouraging —

LOST TIME ACCIDENTS ON DUTY	MAN-DAYS LOST
1975/76 5,158	81,024
1976/77 4,774	67,505
1977/78 4,644	65,278

In addition to normal training programmes associated with safety matters, a new course in Accident Prevention was designed for middle management levels. It utilises the 'family' group approach, with course members being drawn from people who work in the same functional area. The first course was held in June and involved managers from a Telecom District Office in South Australia.

ACOA 'over-reaction'

Not everyone agrees with the view of ACOA Hq. Section Committee on whose head should or should not display a Telecom safety helmet. Here are two sample opinions.

Cover 'Sexist' article raised so much comment in my department I would like to express our concern over the remarks made by J. Goodge. All agreed the picture was a welcome change from machinery and committees.

After publication of the picture there was a rush on for helmets that, I am told, nearly depleted the stock. We do hope the ACOA Section Committee will refer to the members whom they represent when passing judgment on what is sexist and what is not on behalf of the adult broad-minded majority.

ACOA Member,
name supplied.

The over-reaction of ACOA Section Committee to your method of display-

ing Telecom's new safety helmet prompts me to rush to your defence.

To my mind the "valuable space" was devoted to the very "important issue" of occupational health and safety. The new helmet was presented in its natural habitat - sitting on someone's head. Personally I find Miss Pinder's head much easier to look at than that of the average Lineman (or should I say Lineperson?) If that fact brands me as sexist, chauvinistic or even lecherous, all I can say is guilty and proud of it.

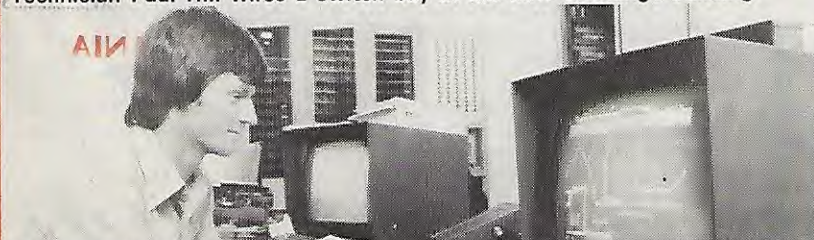
P.J. Horan,
Eng. Training — Melb.



Mr Staley "telephones" WA State Manager Harold Shaw on a cake telephone baked and decorated by Food Services Manager Tom Muir. The photo was taken at a reception which followed the building opening.



Technician Paul Hill wires a switch bay in the new Exchange building.



Computer technician John Vandenberg in the monitor room of the control and supervisory system.

How Telecom Australia is gearing to meet the ever-growing demands of industry and commerce for a specifically designed data network was outlined by General Manager Customer Services Roger Banks at a recent Melbourne business seminar. Mr Banks described some new products and facilities and gave tentative dates of introduction. He emphasised that field trial results and many other factors could affect any timetable. Here is what Mr Banks said:

Telecom moves toward expanded digital data communications

The present communication system is essentially designed for speech transmission with adaptation for video, telegraph or data purposes. In contrast to this, the digital data network will be a network specifically designed for the transmission of data.

It will be designed to provide faster connection and maintenance times.

It is proposed to have a pilot network, connecting Melbourne-Canberra and Sydney, and consisting initially of leased lines, available by 1980/81. Once the trials are concluded this network will be extended to the other State capitals.

During the next few years the feasibility of a public packet switching or circuit switching network will be investigated with a view to incorporating these facilities into an expanded digital data network.

COMPUTER ORIGATION OF CALLS

Computer origination of telex calls is already permitted under certain circumstances and Telecom is currently preparing a specification and detailing the conditions which will allow the introduction of the computer origination of telephone calls. But as most of you will be aware Telecom has no intention of allowing the network to be flooded with "junk calls," i.e. where a computer controlled device selects and calls a block of phone numbers delivering pre-recorded advertising messages.

There are however legitimate applications which will not affect the satisfactory working of the telephone network and accordingly this facility will be permitted under controlled conditions. It is expected to be available in the first quarter of 1979.

1200 BIT/S AUTO-ANSWER MODEMS

The 1200 bit/s auto-answer modem will extend the auto-answering switched network facility beyond the present level of 300 bit/s and should find wide acceptance within the industry. A pilot study using these modems is currently under way with the product expected to be generally available in the first quarter 1979.

1200 BIT/S FULL-DUPLEX MODEMS

The 1200 bit/s full duplex modem for use on the switched network is presently being developed. It is anticipated that the pilot study of the modem will commence in August 1979 with the product being introduced in the first quarter 1980.

HIGHER SPEED DATA TRANSMISSION (2400/4800 BIT/S ON THE PUBLIC SWITCHED TELEPHONE NETWORK)

At present the maximum speed available on the public switched telephone network is 1200 bit/s. A schedule for the purchase of equipment to allow Telecom to provide the higher speed services has been released.

The introduction of the facility is expected to take place in the first quarter 1980. This facility will also allow fall-back from a leased line to the public switched telephone network in the event of failure of the leased line. Development of an auto-answer facility is also taking place and it is hoped to introduce it later in 1980.

MIDAS (Multimode Information Data Acquisition Service)

Arrangements have been finalised between O.T.C. (Australia) and Telecom Australia for the introduction of MIDAS early in 1979.

Through this arrangement national customers of the Australian Telephone System will be able to access, at economical rates, the Tymnet Data Base and Remote Computing Services Network in the U.S.A. The Tymnet system provides access to data bases containing information on topics such as agriculture, business, education, health, patents, statistics and to remote computing services in a range of disciplines.

Australian customers wishing to access U.S. data bases or remote computing services with Tymnet will first establish connection via the Australian network to OTC's MIDAS computer. Following identification by the MIDAS computer the customer will be connected to the host computer.

The charges for the service are made up of two elements:-



General Manager Customer Services Roger Banks . . . faster data previewed.

- i. Data base costs
- ii. Communications costs.

Data base costs will be debited by the data base host to the subscriber. These vary depending upon the data base used and communications costs will be debited by OTC (Australia) and will be \$12 per terminal connect hour and 60c per thousand characters per connection.

WIRED TELETEX

Perhaps one of the most exciting new concepts being developed is the use of wired teletext.

Lord Avebury mentioned at the eighth Australian Computer Conference in Canberra during August of this year that the United Kingdom Post Office will introduce the "Prestel" service in England in early 1979.

This service will enable a normal domestic customer to access data bases via the system and interrogate computers by the use of a modified or new TV set plus a keypad and the use of a normal telephone service.

A feasibility study on the provision of a wired teletext service in Australia is currently being undertaken by Telecom and it is anticipated that a release on the findings will be available late 1979.

The introduction of this service will allow a domestic user to interrogate data bases for information such as:-

- Topical news
- Hot Line news
- Reference Information — e.g. Train times, Theatre Bookings, Holiday Vacancies, etc.
- Long term reference information e.g. Tradesmen
- Prices of consumer goods
- Encyclopaedias etc.

It is envisaged that an average household would just use a TV set with associated keypad whereas business may use a desk type VDU with a full alpha-

Continued P.7

State Energy Managers who recently met in Melbourne to discuss the best methods of managing the consumption of electrical energy throughout Telecom Australia ranged over many possible technical solutions to the problem, but returned continually to the need to involve staff at all levels in the aims of the programme.

They emphasised that energy management is much more than energy consumption. Management requires that excesses are detected, waste is minimised and efficiencies improved, but that our operations are not

curtailed or made more difficult.

In particular, the welfare of the staff, which is so dependent on our big energy users, light and air conditioning, is paramount. So is our service to the customer.

WATT WATCHERS PLEAD FOR STAFF BACKING



Sam Fodero, ST01, resident House Engineer for Headquarters, 199 William St. and 518 Lt. Bourke St., demonstrates air conditioning plant controls to the visiting Energy Managers. From left, Rae Batt (Tasmania), Jim McNally (Headquarters), Andy Mills (Western Aust.), David Young (South Aust.), Lloyd Woods (Queensland), Keith Lierse (Victoria), Sam Fodero, and John Mellor (N.S.W.).

numeric keyboard and an associated teleprinter which would enable the retention of hard-copy if required by the customer.

The customers would pay the normal call fee to the nearest teletext centre and the provider of the information (other than advertisements) would render an account to the customer for the use of the data base in much the same manner as is currently used for debiting time-sharing users.

One could see charges for booking of airline seats, theatre seats and even goods and services being debited through wired teletext by the use of secure identity codes and credit cards.

This system could really make computing power available in the domestic and small business areas at a small cost and negligible initial outlay.

FACSIMILE

Facsimile provides the means for the transmission of documentation and photographic material from one location to another using normal switched or leased telephone circuits.

At the meetings of the International Telecommunications Union in Geneva, facsimile machines have been grouped into three sections namely:-

Group 1 — Transmission of A4 in 6 minutes.

Group 2 — Transmission of A4 in 3 minutes.

Group 3 — Transmission of A4 in 1 minute or less.

Approximately 1300 facsimile units, mostly privately supplied, are in operation on the telephone system today.

From a study of worldwide trends, it has become apparent that the Group 2 machine will become the most used terminal and as such only machines meeting the standards of CCITT. Group 2 will be issued with a permit after 1st January 1979.

When CCITT issues a firm standard on Group 3 machines it is probable that Telecom will require suppliers to meet the international standard to ensure compatibility.

FUTURE PRODUCTS

Mr Banks emphasised that Telecom Australia wishes to base its future technological solutions and commercial decisions on a firm understanding of customer requirements and for this purpose has established and is developing further its market research capacity. He continued:

The total Australian telephone system, while catering adequately for the national requirements, represents only 2% of the world's telephone services. As such Telecom must closely assess the introduction of new services to ensure that they are compatible with current world trends in equipment.

With the exception of teleprinters supplied on the telex network which are suitable for the transmission of low volume, low speed data, Telecom does not supply data terminal equipment and therefore we are in a position of being required to meet supplier's and customer's demands for lines and modems, suitable to meet the ever increasing range of terminal equipments which are emerging.

In an endeavour to achieve a cohesive response from the industry, Telecom met with selected industry representatives, which we now refer to as the Data Communications Consultative Group during May, 1978.

It was agreed at this meeting that this type of forum should continue in order to assist in the specification of long-term requirements for data communications for the Australian computer and information processing industry.

In addition, Telecom has for some time now been meeting regularly with various groups such as the banking industry, the press, libraries, airlines, and so on. Meetings with these specific market segments will be maintained and expanded since it is our intention to ensure that we fully appreciate the whole situation including any requirements for specific applications.

Furthermore, there are daily contacts with individual organisations requiring consultation on data communications and specialist staff are available in each State and at Headquarters of Telecom to meet customer's needs.

Other highlights of the meeting were —

- Continued publicity for the programme, focussing on the people who matter, those close to the switches.

- Feedback of performance to those who control the consumption of electricity, as well as to management.

- Importance of the Energy Manager as a readily available focal point for staff suggestions and comments.

- Need to keep all the staff aware of the efforts they can make at home to curtail electrical energy usage.

- Early achievement of energy savings targets will arise from 'switching-off when not in use' habits.

- Many devices are coming onto the market for control of energy consumption, but these will need considerable evaluation.

Each State, and Headquarters has an Energy Manager engineer in the Buildings Branch who is

responsible for the control of electrical energy consumption within the State.

The Energy Managers are —

John Mellor, NSW Buildings Branch 02 235 8672; Keith Lierse, Vic. Buildings Branch 03 629779; Lloyd Woods, Qld Buildings Branch 07 225 8046; David Young, SA Buildings Branch 08 2256727; Andy Mills, WA Buildings Branch 09 3266634; Rae Butt, TAS Buildings Branch 002 208250; Jim McNally, HQ Buildings Branch 03 6307462.

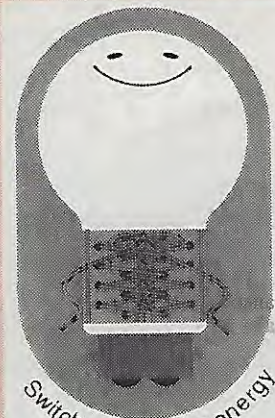
The Energy Managers all supported the need to generate staff support for the programme, and each hoped to become the focal point in the State for ideas, comments and suggestions. Despite the load such a position might bring, they agreed that, without the staff taking an interest, their work would be considerably harder.

Ideas wanted!

This smiling character is the symbol of our WattWatcher Campaign supporting the Electrical Energy Management Programme. It represents an electric light globe.

The arrangement at the waist is a corset. They used to reduce Grandma's waist. In the same way, our WattWatcher corset shows that we have waste under control if we 'switch off and save energy'. The smile comes from being happy that we have cut energy bills and helped the country's resource shortage.

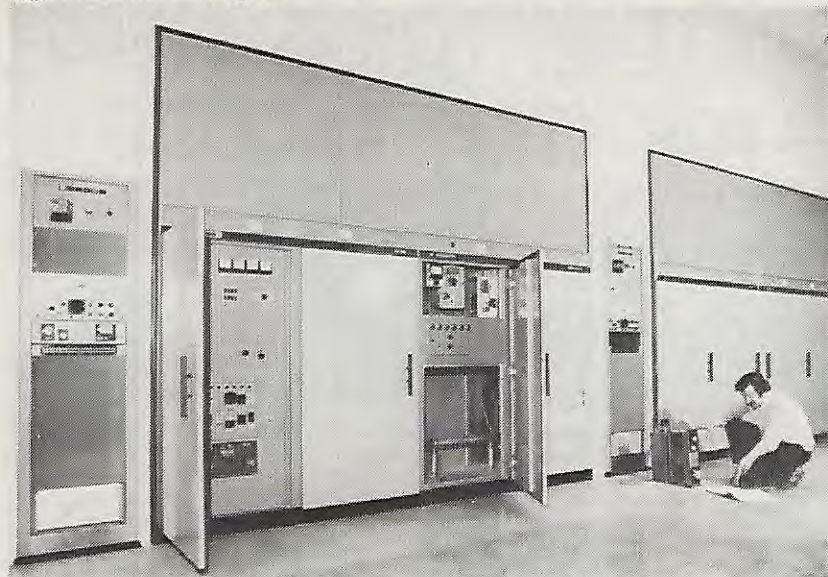
This WattWatcher can remind you not only to switch off when you do not need electricity, but also to trot out your Bright Ideas on how Telecom can improve its operation in little ways and big ways to keep consumption under control. These Bright Ideas may be useful to other people, in other States,



and even to the rest of our people in their homes.

You have a Bright Idea — then why not pass it on to the Energy Manager in your State?

STEAM IS FOR RADIO



The front view of the new 100 kW high frequency shortwave transmitters recently installed at Shepparton. ech John Oakes is seen making adjustments to the speech clipper of the transmitter with closed doors on the right. John has a 45 acre farm nearby on which he crops some millet and runs a few Murray Grays for beef.

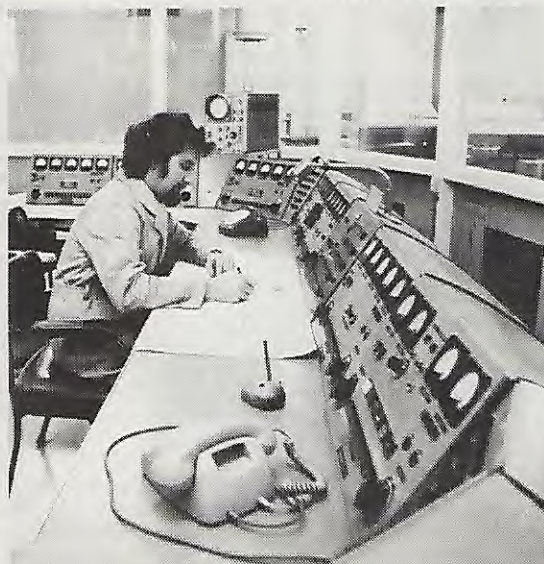
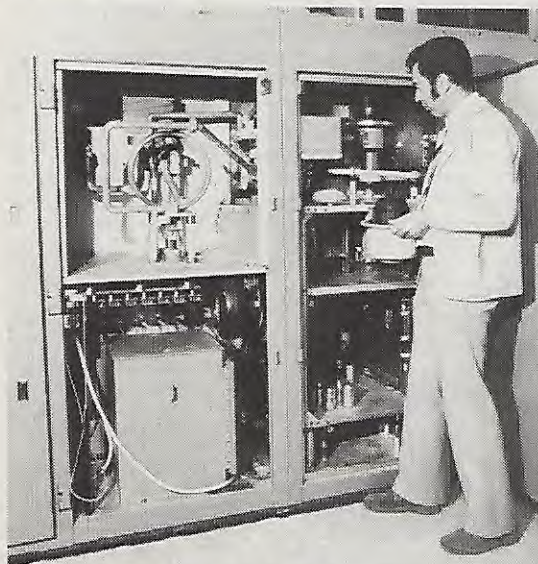
Steam radio is a fact and not just a jocular reference when it comes to Radio Australia's two new 100kW short wave transmitters now undergoing trials prior to commissioning at Shepparton, Vic.

Each of the two main transmitting valves is cooled by

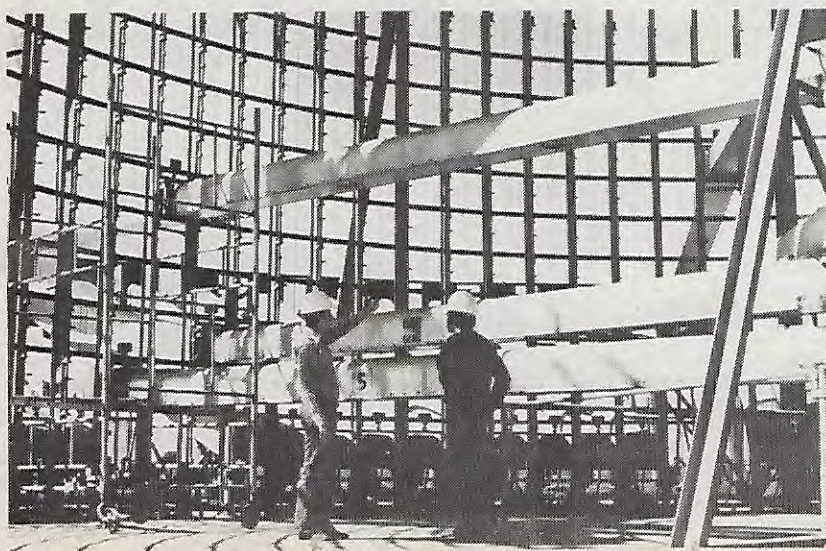
converting three gallons of water to steam which is condensed back to water and continuously re-used — a startling contrast to older style transmitters there which each require some 1200 gallons for cooling purposes.

And herein lies a main advantage of the new American made Harris transmitters now replacing obsolete equipment — dramatic space saving.

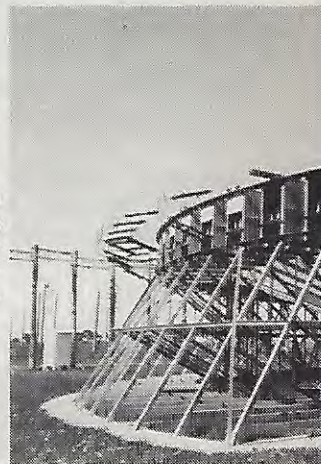
Whereas older transmitters require some



L. The rear of one of the new transmitters with A/STO 1 Bruce Wilson holding the heart of the matter — the \$2300 main transmitting valve which is cooled by a steam process. A very community minded Bruce is a South Ward Councillor of Shepparton City, Vice-President of the Municipal Association of Victoria, Local Government representative on the Environment Protection Council, Chairman Goulburn Regional Family and Community Care Committee — and on top of all that plays percussion with the Shepparton Symphony Orchestra. R. — T.O. David Joseph works the control console.



Lower right: Not a latter-day Stonehenge but an outside shot of the aerial switching matrix which is seen below on the inside with Tradesman Terry Fahey and Tech Greg Woolstencroft carrying out maintenance. The large arms move laterally by remote control to make connection with similar arms outside moving vertically to feed signals to the selected aerial. Latter are seen in pic. right (above).



RADIO REAL AT AUST.

four metres square of floorspace, the new equipment houses comfortably in a 4 metre x 1½ metre cabinet. And there are these additional features:

● **Pulse time modulation techniques** are used, thus reducing the size of transformers etc.

Telecom staff completely designed the cabling, cooling, steam and air systems and installed the transmitters.

At the station the project was the responsibility of STO1 Bruce Wilson and very careful planning was required to overcome the difficulties of putting new equipment into an operating station.

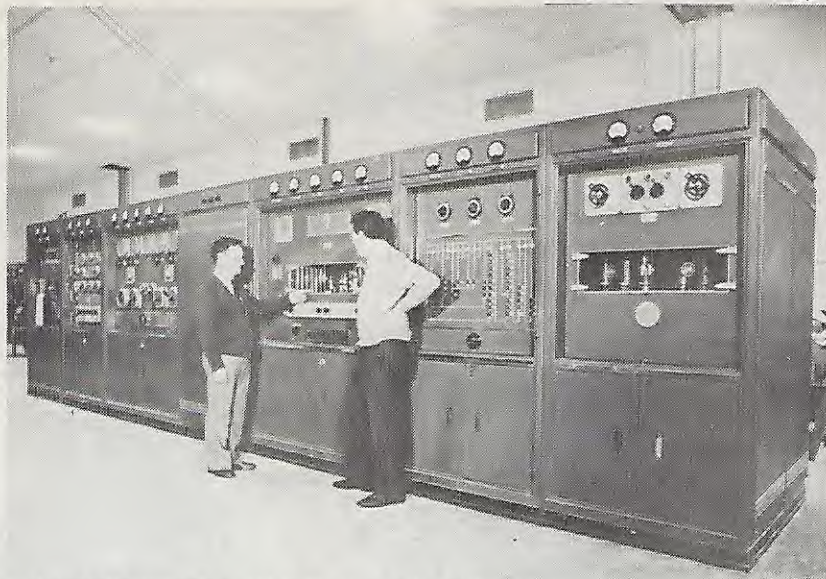
Interfacing new with old equipment required additional regard to safety in view of the need for unbroken operation of the sta-

tion's facilities.

● **High speed tuning and frequency adjustment.** It has the capacity to retune from one spot on the dial to another at any frequency in 10 seconds — an operation which formerly took about 10 minutes.

● **Servo - controlled setting** has superseded manual operation.

● **The transmitters are completely transistorised** apart from the main transmitting valves.



STO 3 Bill Davidson, (1) in charge of the Shepparton station points out features of a piece of original station equipment — a 10 kW transmitter which went into service in 1945 and has just been retired.

tion's facilities.

Cabling and transmission lines had to be extensively modified. High operating voltages were involved. (The new transmitters operate at 29,000 volts compared with 12,000 for the older equipment).

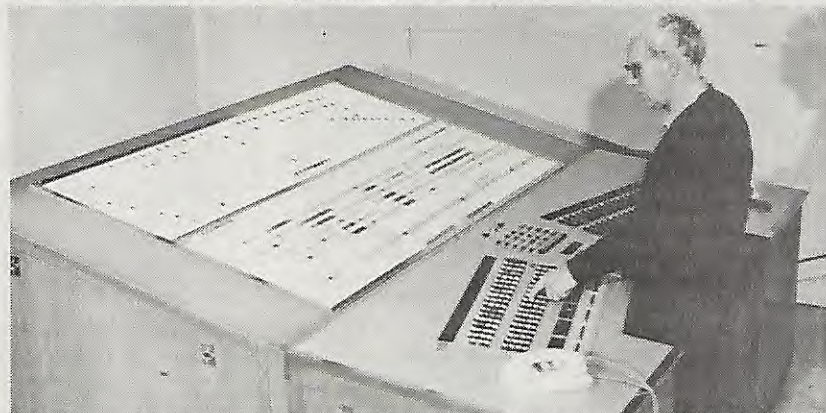
STO 3 Bill Davidson, the man in charge of

Radio Australia, Shepparton said the station now had 10 transmitters — six 100 kW, three 50 kW and one 10 kW. It has a staff of about 50 and has operated 24 hours a day since 1946.

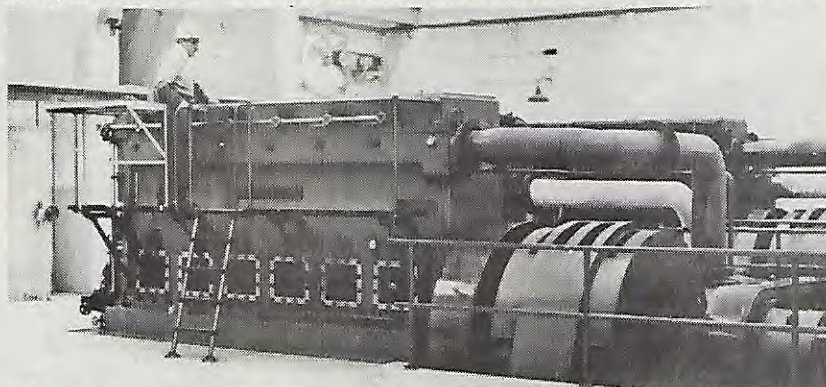
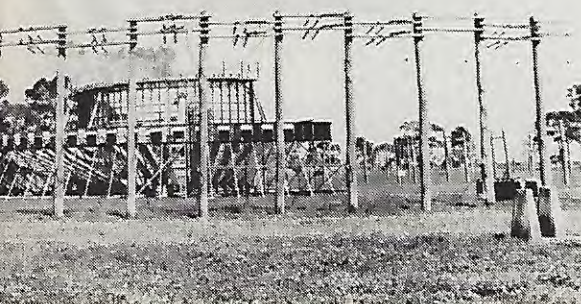
There are 36 aerial arrays on the 583 acre property, beaming programmes to Europe,

America and South Africa, South East Asia and Japan and the Northern Pacific.

A massive matrix switch designed and built by Telecom staff gives each of the 10 transmitters full availability to any of the 36 aerials from a centrally located switching console.



It is from this console that the 10 Radio Australia transmitters can be switched to any one of 36 aerials. Seen making an aerial change is A/T02 Alex McCormack.



Foreman electrical fitter/mechanic Brian Bingham at work adjusting tappets on one of two 800 hp standby alternators which each deliver 400 kW at 6600 volts. Between them, they can shoulder about half the power requirement for the modern Radio Australia operating at maximum capacity. In early postwar days before SEC power was as plentiful and reliable as today, these alternators not only kept Australia on the international air but also contributed power to the grid for general consumption. Brian Bingham says the flywheels each weigh five tonnes and the machines mop up 28 gallons of fuel each an hour at full load.

GRADUATION DAY FOR BUILDING APPRENTICES

It was a big, impressive and enjoyable day recently at Russell Exchange functions room for budding Telecom Buildings Branch tradesmen — the presentation of apprentice awards.

Manager Buildings Branch Viv Straford was there to hand over deeds of apprenticeship to those lads who graduated earlier this year — Bruce Chaplin, Malcolm Bett, Alexander McCrindle, Barry Murray, Russell Ormston, Clinton Thomas and Paul Watkins.

Craft awards were presented by Dennis Chard — O.I.C. Programming and Liaison — Tooronga Training School, to three first year apprentices — awarded by the Industrial Training Commission for exhibits submitted for Apprenticeship Week: Steven Humphries, Michael Cassidy (Honorable mentions), Tony Marchesani (Special honorable mention).

Most consistent apprentice

Most consistent apprentice award was presented by Jim Dunlop — Branch Training and staff development officer to Clinton Thomas who was judged the apprentice who had recorded the most consistent academic and practical performance throughout his apprenticeship.

The afternoon was

chaired by Graham Peacock — section manager, Engineering Services and Telepower, and also present were: Neville Daffy — STO3 operations, Len Marsh — Foreman Gr. 2, service centre, Peter Coyne — A/G foreman Gr. 2, telepower, Peter Hatchel — STO2 Trade School Supervisor, Shane McGrath — A/G STI 1 Trade School, Clinton Thomas A/G T.I. 2 Trade School.

Twelve first year electrical fitter and mechanic apprentices from the training annex were invited to witness the presentations: — Graham Adams, Jeffrey Considine, John Cowley, Brian Fraser, Peter Hearn, Steven Humphries, Tony Marchesani, Martin Stevenson, Steven Webster, Michael Woodward, Peter Semmons, Michael Cassidy.

The three award winning exhibits were on display and attracted considerable attention. Mr Chard said that over 400 exhibits had been judged during apprenticeship week, three of which had been entered by Telecom apprentices and all three had won awards.

Speakers made mention of the Assistance with Studies Scheme and the



Brand new tradesmen l to r back row Malcolm Bett, Alexander McCrindle, Bruce Chaplin. Front: Paul Watkins, Russell Ormston, Clinton Thomas.



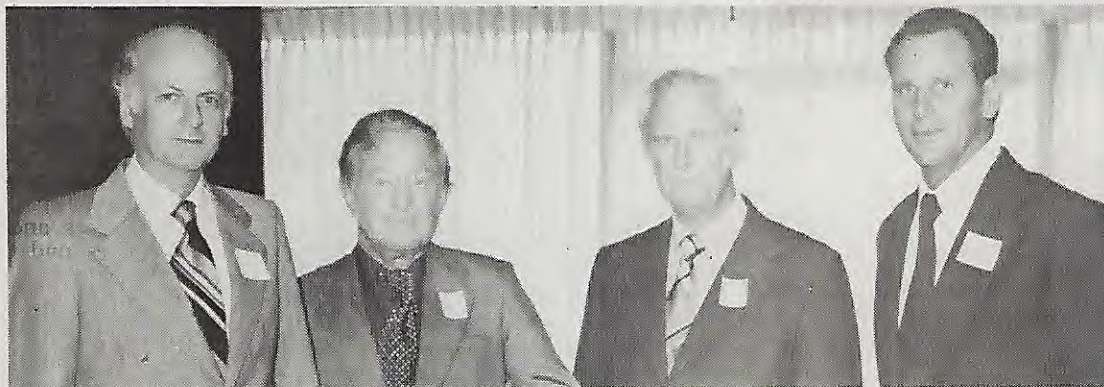
Craft Award recipients Michael Cassidy, Tony Marchesani, Steven Humphries.

excellent opportunities which were available to officers willing to undertake additional studies. As an example, one of the advancing apprentices qualified for the Trainee Technical Officer intake for 1978 and will complete

his training programme and be appointed a Technical Officer Gr. 1 early in 1980.

Several other tradesmen are currently taking advantage of this scheme and hope to qualify for the T.T.O. intake in 1979.

For fitters — a fitting gesture



Mr Bill Schmidt, State Manager for NSW and Assistant Chief General Manager of Telecom Australia, recently hosted a function in Sydney to thank the people concerned with conversion and fitting out at Telecom House — the administrative headquarters for NSW. Among those present were: (l to r) Mr Alan Keir, Director of the Department of Construction, Mr Bill Marshall, Director of Concrete Constructions Pty. Ltd., Mr Schmidt, and Mr John Scott, Sales Manager of Lecon Modular Finishes.

SOCKIN' SHOCKO

Units, developed by Telecom, for testing power outlets, appliances and three-core extension cords to determine their condition of electrical safety, have a number of unique features, placing them ahead of any similar units available commercially.

Yet their simplicity of operation means they can be used by non-technical people.

They are suitable for use with mains voltages ranging from 216-280 volts AC and in the temperature range 0-50° Celsius. The units are capable of testing that —

- the power outlet has a switched active and is effectively earthed
- the exposed metal of an appliance is effectively connected to the earthing pin of its plug
- the insulation resistance of an appliance exceeds specific values.

Telecom Australia is to conduct a six month trial early next year in Sydney of a highly sophisticated electronic system to improve the directory assistance service.

TRIALS SOON FOR ELECTRONIC DIRECTORY AID

The conditions under which the trial will be conducted were negotiated between Telecom and the General Secretary of the Australian Telephone and Phonogram Operators' Association.

As well as providing a better service for customers who need to use directory assistance, the new system is designed to improve the working conditions of the staff.

TEDIOUS TASK

At present they use printed records (a constantly updated telephone directory) to find new and changed telephone numbers.

This is a tedious task which is complicated by people having incorrect spellings of telephone subscribers' names.

In the trial they will use an information display screen about the size of a portable TV which will be linked into a computer containing all up-to-date directory information incorporating the most recent additions and changes to telephone numbers.

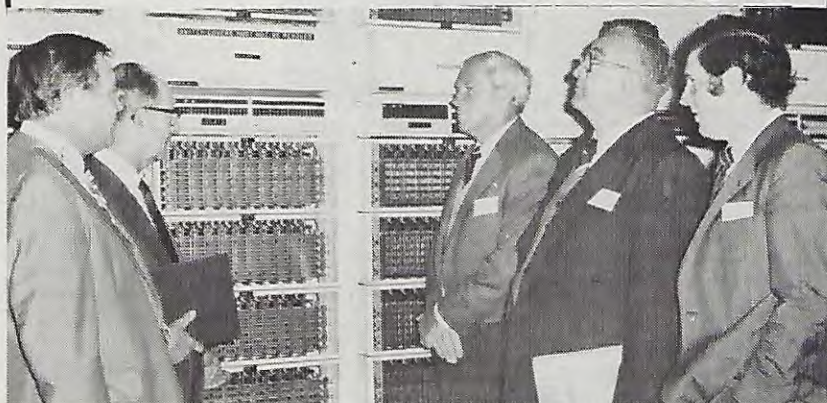
PHONETIC VARIATIONS

As well it will give phonetic variations for names and cross-referencing.

This should enable the directory assistance operators to provide a quicker service more easily. On an average day the operators on 013 answer about 26,000 queries, and at peak periods about 55 operators are on duty to handle about 2,500 calls an hour.

A condition of the

Public Works MPs inspect Tooronga



Members of the Commonwealth Parliamentary Public Works Committee recently inspected Telecom Australia's Technical Training School at Tooronga (Vic) in course of investigating an Army proposal for a training school at Bonegilla. The Committee under the chairmanship of Mr Mel Bungey MP were shown Tooronga facilities by Supervising Engineer Ken Constable (in charge of all Telecom technical training in Victoria) and Asst Sup. Engineer Phil Wilson, responsible for training Commonwealth-wide. Photo shows Ken Constable (second from left) explaining some crossbar exchange equipment to MPs Keith Johnson, Sam Calder, Bert James and Murray Sainsbury. Three army officers from Department of Defence, Canberra were also in the party.

trial which will involve 10 operators and a supervisor is that the staff selected to use the new visual display screens will be examined by an ophthalmologist prior to the commencement of the trial and again after

six months. Other safety and health aspects of the trial will be monitored continuously by Telecom.

A consultative group comprising a Telecom Manager, three telephone supervisors and eight telephonists

are presently discussing such matters as table design, where the terminals will be positioned etc. prior to the introduction of the trial.

A second group will be established once the trial commences and will include representatives of the telephonists working on the new terminals.

FURTHER CONSULTATIONS

Further consultations are planned between Telecom Australia and the ATPOA after the trial has been in operation for three months, and before any extension of the trial is made into an established working practice.

The new system has been operating in the US for about 18 months. The Sydney trial is planned to see how effectively this system can reduce delays answering customers queries and how it operates under Australian conditions both from a staff and engineering viewpoint.

Development of the system was carried out by Computer Consoles Incorporated in the US, who are represented in Australia by Standard Telephones & Cables Pty Ltd.

Communications House — 1806 style

Historic Brush Farm homestead at Eastwood, Sydney, once the site of a government semaphore signal station has recently entered a new communications era with the installa-

tion of a modern miniature automatic telephone internal system made by STC.

Today, Brush Farm is a residential home for mentally sub-normal children. One hundred and seventy-two

years ago it was purchased by Gregory Blaxland for £500 and it remained in the Blaxland family for 80 years. Blaxland later became famous for his exploration of the Blue Moun-

tains with Lawson and Wentworth. For many years the property housed a Government Signal Station. By means of semaphore towers, messages were relayed from South Head to Beacon Hill, to Brush Farm and thence to Government House at Parramatta.

Gregory Blaxland's field extended from Eastwood to Ermington and to the Parramatta River, and in his fields he grew and made the first oat hay produced in the colony. He was also a successful vintner, exporting wine which won a silver medal at the Royal Society of Art in London.

The State Children's Relief Board — the forerunner of the present Youth and Community Services Department, acquired the property shortly after Federation and it has been used for welfare purposes ever since. The Blaxland fields have long since become busy residential suburbs.



OUTPOSTED TELECOM STAFF No. 4 PETER HULME

In gratitude to Telecom

Telecom W.A. is continuing to receive acclaim for its contribution to disaster relief operations following Cyclone Alby that devastated a portion of the south west of the State earlier this year.

In the latest acknowledgement of Telecom's efforts, the Lions, Apex, Rotary and Jaycees organisations have written to State Manager Harold Shaw.

Their letter says, in part: "We wish to thank you for your most generous help and assistance following Cyclone Alby.

"All Western Australia should be thankful for the magnificent way so many people, in so many ways, gave freely to help the less fortunate who had suffered so badly in the wake of Cyclone Alby.

"You were all marvellous and through your actions you touched many hearts."

A number of Telecom staff suffered substantial property losses in the Cyclone yet many of those staff worked around the clock helping to restore communications.

13th September, 1978

Mr A. Chadwick,
Internal Plant Manager,
Telecom,
P.O., Box 1787,
WOLLONGONG, N.S.W.
2500

Dear Mr Chadwick,

I feel that the excellent co-operation given by Telecom staff to the Society in the recent transfer of our 'Central' office operations from Crown Street to Lombard House in Keira Street must not be allowed to pass without recognition.

I was so very much impressed with this co-operation I asked for the names of the men involved in this exercise. They were John Zylstra and Garry Baker under the direction of George Greatrix.

This also gives me the opportunity to place on record my appreciation of the outstanding co-operation and service given to the Society by George Greatrix over a period of many years involving several projects that have resulted from the Society's branch office expansion and re-building programmes. The Society has come to look upon George Greatrix as an adviser in our many plans and he has always been most helpful, never looking for any reward other than the

satisfaction of a job well done.

I can not speak too highly of Telecom's service and I should like you to accept my personal thanks and thanks from my Board of Directors.

Yours sincerely,

R. A. Findlay,
GENERAL MANAGER
Illawarra Mutual Building
Society,
Wollongong East, 2500.

My wife had a bad fall on the breakwater at Port Macquarie, occasioning head and spinal injury. Within 24 hours, the position became critical and I wanted urgently to get in touch with our children in Melbourne.

Unfortunately I was unable to obtain the names of the ladies of the Kempsey Manual Assistance Centre concerned but if this note stirs their memories, I would like them to know that as a fairly extensively travelled person both here and abroad, I have never found such sympathy, kindness and real endeavor to get my calls through.

Ladies, if any of you read this you have my humble thanks for your efforts. I felt that it would be remiss of me, an old man, if I did not make some attempt to thank you.

Brian Kelly,
CAMBERWELL 3124.

SEEP PETER THRIVES ON PNG CABLING HAZARDS

Evaluating cable routes through Papua New Guinea's unstable mountains and volcanic areas is one aspect of the job of Supervising Engineer External Plant (SEEP), done by Australian Peter Hulme, on secondment from Telecom Australia.

PETER HULME supervises lineman PALA VORO as he uses a new jointing machine.

How to keep villagers from putting their pig-fencing stakes through important junction cables is another.

The perennial Papua New Guinea problem of who owns land and what is allowed to be done with it, often a major issue in cable laying, is yet another.

One engineer relates a story of himself running away across a paddock from an irate landowner, who didn't want a cable on his land.

In this case the cable was laid much later, after a road had been built which involved Government officers in long negotiations with the village people.

These have been some of the highlights of constructing and maintaining 2000 sheath kilometres of cable throughout Papua New Guinea.

Peter Hulme, as part of a team of three engineers, three senior technical officers and three line supervisors, is responsible for the design of cable projects, acquisition of material and oversighting of the maintenance of installed network.



Among difficulties in cable laying, not many cables are very long. One of the longest is a 32 km single quad carrier cable linking Lae to Nadzab, the second busiest airport in PNG. A similar length of cable is being installed from Rabaul along the coast to Kokopo, this year.

JAP. CABLE

The subscriber cable being installed on some sections of this route will replace a cable laid by the Japanese during their wartime occupation of this area.

The External Plant Branch has also prepared projects for the installation of cable networks in many remote places in the country. Networks centred on a switchboard or small exchange, have been built in places like Kompiam, hidden in the mountains of Enga Province with only the barest road and light aircraft access available.

This year Postal and Telecommunication Services have let their first contract for the supply of jelly-filled subscriber cable which will be jointed, using connector jointing methods, a big step from

the lead sheath, polythene-jacketed cable and twist-jointed methods in use today.

Training, whether it is to introduce the new methods or instil the old, is one of the biggest jobs facing expatriates in Postal and Telecommunication Services.

As SEEP, Peter Hulme works closely with the Department of Public Utilities' Telecommunication Training Centre in Lae, outlining training programs for Lines staff.

One of the more interesting courses is the jointing course for the land sections of the Seacom and Australia-PNG submarine cables, which includes X-raying the completed joints.

Selected Lines staff attend courses in Australia held by Telecom Australia, OTC or private companies under Peter Hulme's guidance. At present he is designated as Engineer Class 1 unattached, with Telecom.

In Australia Peter is best known in Frankston, Victoria, where he worked for a time as field engineer with the South-East Central Section.



A passion for buying tickets in car raffles and entering competitions with cars for prizes finally paid off for Headquarters Establishment Records clerical assistant Christine Collins (above). After only three attempts she won a Toyota Corona in the Melbourne Sun's Sunball competition. Because she is only seventeen Christine will have to wait until January to collect her prize.



This truck depicting cabling and line developments was one of two entered by Telecom to support the Miles centenary celebrations. There were 150 floats in the procession.

Telecom staff at Miles, 250 km north-west of Brisbane, entered into the spirit of things when the Queensland town recently held its centenary celebrations.

A number of telephones from Miles' Historical Society were connected into the telecommunications network and used for trunk calls by townspeople and tourists.

Miles' telephonists, Joyce and Doris Davidson, were involved in planning activities for the week-long celebrations. Joyce is a supervisor at Miles and president of the town's historical society.

One of the highlights of the celebrations was a procession along the main street and Telecom entered two floats.

Telephones through the years was the theme adopted by one while the other demonstrated modern telephone cable types, and equipment used by lines staff.

Roma Telecom staff, under D.T.M. Bryce Plummer, supplied a vehicle and carried out technical work associated with the working telephones display.

SHIFT MEN — BUT HARD TO SHIFT



These three technicians in Melbourne are close to completing a combined total of 100 years service in the Commission — PMG. What makes this an unusual achievement is that the total to date of 91 years has all been spent in one location — Carlton an inner suburban exchange. They are Maurie Mears (centre) 40 years service, (34 years Carlton) Jack Seymour (right) 32 years service, (32 years Carlton) Charlie Crofts 26 years service, (25 years Carlton) who have seen equipment changes and coped with them all — From a pre-2000 Keith Line Switch Main Exchange for the 3 group, to a present day 12,000 line, high calling rate, ARF 102, X/Bar Exchange and co incoming main for the "3" group. During the 53 years Carlton Exchange has been in existence major building works have been carried out. Jack and Maurie have seen most; watching the exchange being transformed in shape, size and type of equipment installed. Another remarkable feature of endurance has been that all three have been on shift for their entire time whilst at Carlton.

SECOND LEASE OF LIFE

The Bureau International de l'Heure has announced that a positive leap second will be inserted in the scale of Co-ordinated Universal Time (UTC) at the end of December 1978. This means that the last minute of 31st December 1978 UTC will be 61 seconds long; the second-

last second (the sixtieth) of this minute will commence at 23h. 59m. 59s. and finish at 23h. 59m. 60s. UTC on 31st December 1978 and the last second (the leap second) will commence at 23h. 59m. 60s. and finish at 0h. Om. Os. UTC on 1st January 1979. This last mentioned

instant corresponds to 11h. Om. Os. Australian Eastern Summer Time.

The Australian Telecommunications Commission's scale of UTC, designated UTC (ATC), will be adjusted in accordance with the above paragraph.

YASS, SIR, JUST A TOUCH OUT



Yass (NSW) Lineyard touch footy team, one of 18 sponsored teams in the local competition, were just beaten out of the final four. Here is the team resplendent in their Telecom T-shirts: Back Row — W. Warner (clerk), W. Greenwood, P. McKinnon (lineman), W. Payne (lineman), R. Davis (lineman); Middle Row — D. Paterson (supervisor's son), P. Blayden, R. Poidevin, B. Carey; Front Row — P. Furlonger (lineman) Z. Danilzark; Mascot — Scott Davis; Absent — R. Moore (supervisor), K. Brown (lineman).

EMERGENCIES & what to do

Emergency 6: Your Car Catches Fire



Most vehicle fires are caused by a short circuit in the electrical system. On no account touch burning wires or insulation with your bare hands.

Action 1 Stop and turn off the ignition.

Action 2 Get your passengers out and away from the car.

Action 3 Try to remove the cause. Disconnect the battery quickly if possible.

Action 4 If (3) is not practicable, rip loose any burning wires with a handy implement, not with your bare hands.

Action 5 Use an extinguisher, otherwise try to smother the flames with a thick cloth or garment, sand, dirt.

Action 6 If beyond your control get well away in case there is a petrol explosion.

As estimated 80,000 people visited the Telecom Display Centre at the 1978 Royal Melbourne Show this year.

80,000 saw us at Melb. Show

The display, which included indoor and outdoor segments had "Current and Future Communications" as the theme and was the first Telecom exhibit at this Show since 1964.

A number of different areas of Telecom contributed to the development of the site:-

- ★ The Customer Consultancy area of Customer Services Department Victoria was responsible for general co-ordination.
- ★ The outdoor display was arranged by the Design and Industrial Design Section, Engineering Services, Headquarters. This segment included the Headquarters Mobile Telecom Display Unit comprising two large caravans and a geodetic aluminium/canvas dome which featured a working range of Telecom customer equipment.
- ★ Engineering Services Victoria carried out extensive site renovation which included carpentry, glazing, painting and signwriting.
- ★ An indoor display in the site building covering future communications was provided by Research.

This included an explanation of Wired Teletext using a videotape recording and large TV monitor and an Optical Fibre exhibit which demonstrated the transmission by fibre of a television picture.

- ★ The Publicity area of Engineering Drafting provided further display material including the new wall-fone colour range.
- ★ The Training area of the Personnel and Industrial Relations Department provided films on Telecom activities.
- ★ An outposted Telecom Business Office was also provided to handle Telecom business and country and metropolitan enquiries were received and handled on the spot.

The display was staffed from 8 a.m. to 10 p.m. on most days. Fifty-four officers from the Operations and the Customer Services Departments worked at various times.

Show bags containing project material were handed out to suitable age children and proved very popular. Telecom balloons and rulers were distributed where appropriate to the more junior visitors.

OCCUPATIONAL HEALTH PLAN

The acting Manager-Director (Mr W. J. B. Pollock) has broadly approved the plan for occupational health prepared by Dr Hocking and the Department of Health has also agreed to it. Recruitment to staff the occupational health service will first commence in New South Wales and Victoria, and later the other states. An industrial hygienist will be sought to work with Dr Hocking at Headquarters. Amongst the first activities of the new service will be promotion of the hearing conservation program, restructuring first aid services and helping place handicapped persons. Below, Telecom cartoonist DAAG DURICH makes a breezy comment.



API MELB. CARNIVAL

More than 300 competitors including visitors from all States took part in a highly successful 1978 Melbourne API Sports Carnival last month.

The week's programme included competition in Australian Rules, soccer and hockey and wound up with a presentation dinner at the Old Melbourne Hotel.

Here is how the States fared in each sport and other details:

AUST. RULES

	P	W	L	D	F	A	PTS	%
VIC	3	3	-	-	373	171	12	218.13
TAS	3	2	1	-	217	233	8	93.13
SA	3	1	2	-	218	249	4	87.55
WA	3	-	3	-	149	304	0	49.01

Leading goal scorers: Dan Neary (VIC) 8, Ricky Young (TAS) 8, Greg Wickens (SA) 7, John Kennedy (VIC) 8, Trevor Tyler (VIC) 6.

HOCKEY

	P	W	L	D	F	A	PTS
NSW	4	4	-	-	19	6	8
TAS	4	2	1	1	13	5	5
WA	4	2	2	-	10	8	4
VIC	4	1	2	1	7	12	3
SA	4	-	4	-	1	19	0

Leading goal scorers: Mick Gillon (TAS) 8, John Jenkins (NSW) 5, Steve Rawlings (WA) 4, Dave Wheatley (VIC) 4.

SOCCER

	P	W	L	D	F	A	PTS
VIC	3	3	-	-	13	2	6
WA	3	2	1	-	8	8	4
NSW	3	1	2	-	2	5	2
SA	3	-	3	-	5	13	0

Leading goal scorers: Alain Caperon (VIC) 6, Jan Dabrowski (WA) 5, Joe O'Hea (VIC) 3.



Melbourne API Carnival Victors — Top: Undefeated Victorian Aust Rules; Centre: Invincible NSW hockey team and bottom: Unbeatable Vic. Soccer combination.

TELECOM TOM
by
DAAG DURICH

Triple rescue sees dual honor for apprentice

Glen James, an apprentice tradesman at North Strathfield Training College, NSW, whose heroic efforts in rescuing three people from drowning at Warriewood Beach, Sydney in April, 1978, (Telecom No. 30, May, 1978) has been awarded the Certificate of Merit by the National Council of the Surf Life Saving Association of Australia.

A further honour as a member of the Australian Surf Life Saving Association has now been received by Glen with his selec-

tion Instructional Team to visit the Philippines in December and January.

The team which is sponsored by the Manly - Warringah Branch of the Association is to leave Sydney

on Boxing Day for a two and a half week visit.

During this period they will be engaged on instructional work and assisting in the establishment of a Life Saving Association in the Philippines on a proper footing.

The Training College Branch of the A.P.I. conducted a collection for Glen and he was presented with a cheque from his workmates at a morning tea function at the Training College last

month.

The cheque was presented to Glen by Peter Gill, Supervising Engineer.

That's stroke co-ordination.



● TELECOM'S Co-ordinator Progress Reporting in Queensland, Alan Poulsen, pictured after teeing off in a Program tournament held recently in conjunction with the 1978 Dunhill Queensland Open. Alan is a keen golfer and teamed up with top Australian professional, Jack Newton, to finish only seven points behind the competition winners on the day.



Blooming bus. office takes floral prize



Telecom's Toowoomba business office won distinction in the Queensland city's annual Carnival of Flowers floral competition. The staff-decorated office won three prizes — best foyer or waiting room, the champion award for decorated premises, and overall grand champion.

Toowoomba travelling supervisor, Bev Irwin (pictured here) designed and prepared the set which transformed the office reception area into a mediaeval castle and floral display.

Theme for the display was "The Lady of Shallott" Bev's chief assistants were travelling supervisor,

Cecily Logan, and clerical assistant, John O'Hara.

Business office staff wore mediaeval costumes for the four days the display was on show for the public.

More than five hours work was needed to arrange the set using props Bev was able to borrow

through her associations with Toowoomba choral, philharmonic and repertory groups.

Several Toowoomba businesses contributed to the display with donations of materials.

All business office staff took part and are already planning next year's display.

TO BE BOOK

Telecom's recent historical serial — Never Never Telegraphist is to be published in book form early next year by Mitchell Press of S.A.

Abreast of a belt hazard

Tech. Officer Peter Sanderson of Bangalow Exchange near Lismore N.S.W. writes to highlight a somewhat unsuspected hazard in the wearing of car safety belts. A safety belt saved his mother-in-law from serious injury in a bad car smash recently but she sustained a chest injury which should not have happened to a safety belt wearer. Investigation showed that the lady had been wearing a large metal ornament on a chain which lay beneath the belt sash and resulted in a fractured sternum. Peter goes on to say that it is far from uncommon to see drivers and passengers with pens, sunglasses, even screwdrivers in breast pockets — all of which could pierce a lung or cause severe bruising or laceration. "I think this aspect of safety should be well publicised to prevent unnecessary injury" adds Peter, and we agree.

TOUCH FOOTY BOOMS IN TELECOM QLD.



● MEMBERS of Planning Section's Touch Football team are (from left) back row: Greg Dunn, Bruce Cook, Ross Fitch, John Catchlove, Warren Guppy (Capt), Ray Beresford. Front row: Kerry Irlam, Graham Slater, Trevor Williams, Alan Connell, Ross Rutledge, and Sam Kemp.

More than 300 men and women from Telecom offices in Brisbane meet each week in an annual Touch Football competition. The competition began three seasons ago and now attracts up to 19 teams in first and second division.

Touch Football is played on API Touch Football As-

sociation rules and resembles Rugby League. One major exception is that there is no tackling of a player in possession of the ball. He or she must play the ball after being touched by a player from an opposing team. Only eight players from each team are allowed on the field at any one time.

The A.P.I. and the Post and Telecom Credit Union will award perpetual trophies to teams in each division which take out grand finals to be played on February 14.

MEN, WOMEN TEAMS COMPETE

Teams taking part in both

men's and women's competition meet each Wednesday evening. Women's games are also played on Monday evenings. Up to six games are played on two ovals each Wednesday night.

First Division teams include players from Customer Services, Sales,

Finance and Accounting, Supply, Central Telegraph Office, and Edison exchange. Second Division players come from Planning, Installing, Central Telegraph Office, Line Depots from Moorooka and Aspley, Building Services Workshop, and Buildings Branch.

Cartophiliac's "HELP!"

A Headquarters man, John Mifsud suffers severely from cartophily — a disease which involves him in the compulsive hoarding of small squares of cardboard.

Right now, he's got some 20,000 pieces but he's far from satisfied and he wants you to help him if you can with more.

You guessed it — John is a collector of cigarette cards — a hob-

by which had its origins in the 1870's when American tobacco manufacturers started using cardboard as cigarette packet stiffeners.

They soon hit upon the idea of using these inserts for advertising and began embellishing them with pictures which proved immediately popular. Tobacco companies all over the world followed suit and thus began an enjoyable hobby that has

persisted to this day.

Unfortunately, says John Mifsud, only a handful of provincial companies in the UK still produce these cards. However, some non-tobacco companies such as tea and breakfast food manufacturers took up the practice and these are known as trade cards.

John Mifsud would be glad to have your help in enlarging his collection which already includes 350 50-card sets

and would be glad to have trade and cigarette cards sent along to him at 39 Prince St., Essendon North Vic 3041. He is a member of the

Cartophilic Society of Australia and would welcome contact from people interested. His phone number is (03) 630 7847.

Sutherland Ops' lovesome thing (God Wot) wins council prize



Sutherland NSW Telecom Operations Depot in Auburn Street, was awarded second prize in the inaugural Sutherland Shire Garden Competition (Section 6) this year.

Councillor Michael Tynan presented the award to Tom Lyon, O.I.C. of the Depot, and congratulated staff on their civic pride and enthusiasm.

The garden was established almost two years ago and considerable spare time and effort was required by the staff, to re-establish the tidy appearance and natural beauty of the original garden.

Above: Tom Lyon, O.I.C. Sutherland Telecom Operations Centre, (left) receives from Councillor Michael Tynan the Second Prize in Section 6 of the Inaugural Sutherland Shire Garden Competition.

